## ABSTRACT OF THE DISCLOSURE

A link quality estimating method and apparatus adopts a fading value to modify an estimated link quality of a channel thereby obtaining a measure being very close to the real link quality. The method is implemented by utilizing two sequentially received long training symbols to derive two sets of subcarrier gain values  $H_{k,1}$  and  $H_{k,2}$ . Based on the subcarrier gain values  $H_{k,1}$  and  $H_{k,2}$ , parameters representing the estimated channel gain value (A), the fading value (F) and the noise quantity (B) of the channel are all calculable. With these parameters, the link quality (LQ) of said communication channel is derived.